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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,295	07/16/2001	Kazuhito Gassho	211153US2PCT	1452

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EXAMINER	
SINGH, SATWANT K	

ART UNIT	PAPER NUMBER
2626	

DATE MAILED: 06/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/889,295	GASSHO ET AL.	
	Examiner	Art Unit	
	Satwant K. Singh	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 July 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/01, 05/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

The references cited in the Search Report PCT/JP00/08016 have been considered.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-36 are rejected under 35 U.S.C. 102(b) as being anticipated by Shimakawa et al. (US 5,802,260).

3. Regarding Claim 1, Shimakawa et al disclose a printing system, comprising a plurality of printing apparatuses, each having a printing mechanism and a buffer for spooling assigned to the printing mechanism, and at least one information processing apparatus outputting print jobs, which are connected mutually, each of the print jobs being sent from the information processing apparatus to the buffer included in any of the plurality of printing apparatuses and being printed by the printing mechanism by utilizing the spooling function of the printing apparatus, said printing system comprising: a source apparatus specification unit that specifies a source printing apparatus (Fig. 4, print request section, 202) (user request a printing operation on the printer105) (col. 4, line 67, col. 5, line 1), which entrusts at least one print job stored in its own buffer to

another printing apparatus (request of the printing job may be transferred to another printer 106) (col. 6, lines 3-15), in a preset range of printing apparatuses (printers 105, 106); and a job transfer unit that transfers the at least one print job stored in the buffer provided in the source printing apparatus specified by said source apparatus specification unit to the buffer of another printing apparatus in the preset range of printing apparatuses (Fig. 5, S307, transfer the printing job from spool 225 for printer 105 to spool 243 for printer 106) (col. 6, lines 3-15).

4. Regarding Claim 2, Shimakawa et al disclose a printing system, wherein said source apparatus specification unit comprises: a first information acquisition unit that obtains first information representing a congestion status of print jobs in the buffer of each printing apparatus, which is included in the preset range of printing apparatuses among the plurality of printing apparatuses (Fig. 4, communication I/F section 203) (printing jobs stored in the spools 225, and 243); and a unit that detects a printing apparatus having a long queue of the print jobs based on the first information obtained by said first information acquisition unit, and specifies the detected printing apparatus as the source printing apparatus (a plurality of printing jobs requested by a plurality of other users are stored in the spool 225 so that the printing job for the particular user is in a waiting queue with a considerable time expected before start of execution,... printer 106 having a vacant spool 243) (col. 6, lines 3-15).

5. Regarding Claim 3, Shimakawa et al disclose a printing system, said printing system further comprising: a selection unit (Fig. 4, continued print processing section 204) (the printer first requested for printing, and an alternate printer) that selects a

printing apparatus having a sufficiently short queue of print jobs in the preset range of printing apparatuses, based on the first information obtained by said first information acquisition unit, wherein said job transfer unit sets the printing apparatus selected by said selection unit to a destination of the transfer of the print job (a plurality of printing jobs requested by a plurality of other users are stored in the spool 225 so that the printing job for the particular user is in a waiting queue with a considerable time expected before start of execution,... printer 106 having a vacant spool 243) (col. 6, lines 3-15).

6. Regarding claim 4, Shimakawa et al disclose a printing system, wherein said source apparatus specification unit comprises: a second information acquisition unit that obtains second information representing a status of the printing mechanism of each printing apparatus in the preset range of printing apparatuses' (Fig. 4, communication I/F section 203), and a unit that detects a printing apparatus having the printing mechanism in an error status based on the second information obtained by said second information acquisition unit, and specifies the detected printing apparatus as the source printing apparatus (malfunction of the printer 105 during the operation) (col. 5, lines 63-66).

7. Regarding Claim 5, Shimakawa et al disclose a printing system, said printing system further comprising: a selection unit that (Fig. 4, continued print processing section 204) (the printer first requested for printing, and an alternate printer) selects a printing apparatus having the printing mechanism not in the error status in the preset range of printing apparatuses, based on the second information obtained by said

second information acquisition unit, wherein said job transfer unit sets the printing apparatus selected by said selection unit to a destination of the transfer of the print job (printer 106 having a vacant spool) (co. 5, lines 63-67, col. 6, lines 1-15).

8. Regarding Claim 6, Shimakawa et al disclose a printing system, wherein each print job output from the information processing apparatus comprises first label data representing whether or not the print job is a possible candidate for the transfer by said job transfer unit, and said job transfer unit comprises a transfer prohibition unit that prohibits the transfer of a print job that has been determined not to be a possible candidate for the transfer based on the first label data (Fig. 5, S307, comparing user names) (co. 7, lines 56-62).

9. Regarding Claim 7, Shimakawa et al disclose a printing system, wherein each print job output from the information processing apparatus comprises second label data representing a priority order of printing by the spooling function, and said job transfer unit selects the at least one print job to be transferred, based on the second label data (spool has such a queue structure so as to execute a plurality of stored printing jobs according to printing requests on a first-come first-served basis) (col. 6, lines 10-15).

10. Regarding Claim 8, Shimakawa et al disclose a printing system, said printing system further comprising: a job transfer information unit that informs the information processing apparatus, which is the output source of the at least one print job to be transferred by said job transfer unit, of the another printing apparatus specified as a destination of the transfer of the print job (Fig. 5, S304, request continued printing on printer 106) (col. 7, lines 30-41).

11. Regarding Claim 9, Shimakawa et al disclose a printing system, comprising a plurality of apparatus groups, each apparatus group comprising a plurality of printing apparatuses, each having a printing mechanism and a buffer for spooling assigned to the printing mechanism, and at least one information processing apparatus outputting print jobs, which are connected mutually, each of the print jobs being sent from the information processing apparatus to the buffer included in any of the plurality of printing apparatuses and being printed by the printing mechanism by utilizing the spooling function of the printing apparatus, said printing system comprising: a source apparatus specification unit that specifies a source printing apparatus (Fig. 4, print request section, 202) (user request a printing operation on the printer105) (col. 4, line 67, col. 5, line 1), which entrusts at least one print job stored in its own buffer to another printing apparatus, in a range of one certain apparatus group (request of the printing job may be transferred to another printer 106) (col. 6, lines 3-15); and a job transfer unit that transfers the at least one print job stored (request of the printing job may be transferred to another printer 106) (col. 6, lines 3-15) in the buffer provided in the source printing apparatus specified by said source apparatus specification unit to the buffer of another printing apparatus in a range of at least two apparatus groups, which includes at least the certain apparatus group to which the source printing apparatus belongs (Fig. 5, S307, transfer the printing job from spool 225 for printer 105 to spool 243 for printer 106) (col. 6, lines 3-15).

12. Claims 10, 20, and 22 are rejected for the same reason as claim 2.

13. Regarding Claim 11, Shimakawa et al disclose a printing system, said printing system further comprising: a target apparatus group specification unit that specifies a plurality of target apparatus groups as potential destinations of the transfer by said job transfer unit (Fig. 4, continued print request section, 204); an acquisition unit that obtains the first information in a range of the plurality of specified target apparatus groups (Fig. 4, communication I/F section 203); and a selection unit that selects a printing apparatus having a sufficiently short queue of print jobs in the range of the plurality of specified target apparatus groups, based on the first information obtained by said acquisition unit, wherein said job transfer unit sets the printing apparatus selected by said selection unit to a destination of the transfer of the print job (a plurality of printing jobs requested by a plurality of other users are stored in the spool 225 so that the printing job for the particular user is in a waiting queue with a considerable time expected before start of execution,... printer 106 having a vacant spool 243) (col. 6, lines 3-15).

14. Claims 12, 28, and 30 are rejected for the same reason as claim 4.

15. Claims 13 and 31 are rejected for the same reason as claim 11.

16. Regarding Claim 14, Shimakawa et al disclose a printing system, said printing system further comprising: a target apparatus group specification unit that specifies a plurality of target apparatus groups as potential destinations of the transfer by said job transfer unit (Fig. 4, continued print request section, 204); a detection unit that detects an available printing apparatus as a possible candidate for destination of the transfer by the job transfer unit in each of the plurality of target apparatus groups specified (Fig. 4,

communication I/F section 203); a management unit that collects all the available printing apparatuses in the respective target apparatus groups detected by said detection unit and stores a result of the collection as management data (spool in the single print server is constructed to store the printing jobs for each network printer (col. 4, lines 31-36); and a selection unit that selects one printing apparatus as a destination printing apparatus for the transfer by said job transfer unit, based on the management data (a plurality of printing jobs requested by a plurality of other users are stored in the spool 225 so that the printing job for the particular user is in a waiting queue with a considerable time expected before start of execution,... printer 106 having a vacant spool 243) (col. 6, lines 3-15).

17. Regarding Claim 15, Shimakawa et al disclose a printing system, wherein each of the plurality of target apparatus groups specified by said target apparatus group specification unit comprises said management unit (Fig. 4, spools 225 and 243), and specific data including at least the available printing apparatuses in the respective target apparatus groups detected by said detection unit are transmitted between the plurality of target apparatus groups specified by said target apparatus group specification unit, so that the total data is common to the plurality of target apparatus groups (spool in the single print server is constructed to store the printing jobs for each network printer (col. 4, lines 31-36).

18. Regarding Claim 16, Shimakawa et al disclose a printing system, wherein said management unit is provided separately from the plurality of target apparatus groups specified by said target apparatus group specification unit and is actualized by a

computer connected to each target apparatus group via communication (spool in the single print server is constructed to store the printing jobs for each network printer (col. 4, lines 31-36).

19. Regarding Claim 17, Shimakawa et al disclose a printing system, wherein said each printing apparatus further comprises: a receiver unit that receives an external print job (Fig. 4, communication I/F section 222); an identification unit that carries out identification to determine whether or not the external print job received by said receiver unit has been sent via said job transfer unit (Fig. 4 continued print processing section 223) (Fig. 5, S304, 305); and a processing change unit that changes over a series of processing to be executed, based on a result of the identification by said identification unit (Fig. 5, S306, check access right based on user name).

20. Regarding Claim 18, Shimakawa et al disclose a printing system, wherein said each printing apparatus further comprises: an authentication unit that authenticates a source of transmission of the print job, wherein said processing change unit comprises a unit that switches over a working status of said authentication unit between execution and non-execution (Fig. 5, S307) (col. 7, lines 53-62).

21. Claims 19 and 25 are rejected for the same reason as claim 1.

22. Claims 21 and 26 are rejected for the same reason as claim 9.

23. Claims 23, 27, 32, 34 and 36 are rejected for the same reason as claim 17.

24. Claims 24, 33, and 35 are rejected for the same reason as claim 18.

25. Claim 29 is rejected for the same reason as claim 5.

Conclusion

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Okutsu (US 5,630,062) discloses an image forming system which selects one of a plurality of printers connected to a network in correspondence with the print data.

Mastie et al. disclose a system for routing print jobs to one of a plurality of printers or print queues.

Kopecki discloses a printer system for printing data from a network device connected to a network connection system.

Irie et al. disclose technique for controlling the execution of an action in a lower layer system by a higher layer system.

Miura et al. disclose a network print system which aims at printing high-quality image data.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Satwant K. Singh whose telephone number is (571) 272-7468. The examiner can normally be reached on Monday thru Friday 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly A. Williams can be reached on (571) 272-7471. The fax phone

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Satwant K. Singh
Examiner
Art Unit 2626

sks

MARK WALLERSON
PRIMARY EXAMINER